# Gestion de Projet et Génie Logiciel
# Introduction du cours
# Master 1, Lyon 1

Matthieu Moy

UCBL

2020-2021

# Outline

# Objectives

- Software engineering (Génie Logiciel): the art of making “good” software, at reasonable price
- Project management: what’s left, other than development? (need analysis & specification, team management, ...)
- Approach:
  - Good practices: tests, design patterns, ...
  - Tooling: continuous integration, version control, unit testing, ...
  - Organization: project lifecycle, agile methods
  - Speakers from several external companies
- Many notions usable directly $\Rightarrow$ apply in your school project, your company (apprentices), ...

# Practical Aspects

- Course material: `https://forge.univ-lyon1.fr/matthieu.moy/mif01-2020`
  - In your web browser
  - `git clone https://forge.univ-lyon1.fr/matthieu.moy/mif01-2020` once, `git pull` periodically.
  - Slides, exercises, labs, examples of code
- Evaluation:
  - Final exam
  - Mini-project: deadline = Sunday, Sept 20nd 2020, 23:59 (TOMUSS)
  - Teams of 2 students (exceptionally, team of 1 is possible, without bonus)
- Schedule: see ADE (link on home page above)

# Assumed to be Previously Learnt

- Object-Oriented Programming basics:
  `http://tabard.fr/courses/2015/mif17/2015/MIF17_Rappel_objet.pdf`
- UML Modeling basics:
  - Class diagrams (classes, object, package, etc.):
    `http://tabard.fr/courses/2015/mif17/2015/UML-Statique.pdf`
  - Dynamic diagrams (sequence, state-machine):
    `http://tabard.fr/courses/2015/mif17/2015/UML-Dynamique.pdf`

# Outline

- Generalities (today, tomorrow)
- Tools for code management
- Design-patterns
- Specifications
- Agile methods
- Tests
- Ethics
- Project management

# Distribution

- 10×1h30 Lecture (CM)
- 2×1h30 Tutorial (TD)
- 8×1h30 Labs (TP)